



ALLIANCE FOR THE GREAT LAKES

October 1, 2007

VIA FAX AND U.S. MAIL

Mr. Stan Rigney
Indiana Department of Environmental Management
Office of Water Quality, Industrial NPDES Permits Section
MC 65-42 IGCN Rm. 1255
100 North Senate Ave.
Indianapolis, IN 46204-2251
Fax: (317) 232-8637

Re: Comments on the NPDES Permit No. 0000281, United States Steel Gary Works Facility

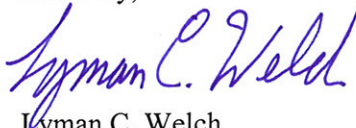
Dear Mr. Rigney:

With 95 percent of the America's fresh surface water, the Great Lakes are a national and international treasure, providing drinking water, jobs and recreation to tens of millions of people. This month, the Brookings Institution found that their restoration should no longer be viewed as an expense, but an investment: for every dollar spent on bringing the Great Lakes back to health, the region is likely to see another dollar returned on its investment. With the enclosed comments, we urge IDEM to ensure the U.S. Steel permit:

- Eliminates the 5-year pass proposed for several pollutants, including mercury
- Requires substantial reductions in free cyanide, oil, grease, and thermal pollution to the Grand Calumet River
- Reduces stormwater runoff to Lake Michigan containing unknown quantities of pollution

The enclosed comments were prepared by a panel of experts, including Tina Rongers of the Alliance's board of directors, who chaired the effort, Jim Filippini and a retired member of the U.S. EPA Region 5's Water Division staff. We urge IDEM to incorporate the comments enclosed. Thank you for this opportunity to provide comments on the NPDES permit application by United States Steel, Gary Works facility. Should you have any questions about the Alliance's comments, please do not hesitate to contact me at 312-939-0838 x230 or lwelch@greatlakes.org.

Sincerely,



Lyman C. Welch
Manager, Water Quality Programs



Eliminating Great Lakes Water Pollution from Northwest Indiana

Comments
to the
Indiana Department of Environmental Management
On
U.S. Steel Gary Works Facility's
National Pollutant Discharge Elimination System
Permit No. 0000281

October 1, 2007

Alliance for the Great Lakes
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The Great Lakes Are Our Nation's Lifeblood

With 95 percent of America's fresh surface water, the Great Lakes are a national and international treasure, providing drinking water, jobs and recreation to tens of millions of people. This month, the Brookings Institution found that their restoration should no longer be viewed as an expense, but an investment: for every dollar spent on bringing the Great Lakes back to health, the region is likely to see at least another dollar returned on its investment.¹ This study confirms what the public has long understood: perpetuating pollution is not good for the economy; restoring the ecosystem is good for the economy.

Bringing the Great Lakes back to health will not be accomplished with the wave of a magic wand, however. It will be done community by community, addressing each individual source of pollution. Indiana's major shoreline industries, like United States Steel (USS), intake millions of gallons of fresh water daily and discharge back vast quantities of pollution effluent into the Grand Calumet River and Lake Michigan. Therefore, we need to ensure that "NPDES" stands for – *eliminating* pollution over time – will go a long way to actualizing this return on investment.

The Alliance for the Great Lakes (Alliance) has special reasons for urging Indiana Department of Management to issue strong permits for wastewater discharges into U.S. navigable waterways. Formed in 1970, the Alliance's mission is to conserve and restore the world's largest freshwater resource using policy, education and local efforts, ensuring a healthy Great Lakes and clean water for generations of people and wildlife. The Alliance also has thousands of dues-paying members and volunteers around the region who donate their time and money in support of the organization's work for a vibrant Great Lakes ecosystem.

The Alliance has several departments, including a Water Quality Program, working on policy reform and local efforts to eliminate raw sewage overflows, improve recreational water quality, and reduce mercury contamination of the region's waterways. Just this year alone we have provided or are providing guidance on other critical NPDES permits, such as those for BP's Whiting, Indiana, refinery.

These comments are submitted on behalf of the Alliance for the Great Lakes, a nonprofit environmental organization with offices in Grand Haven, Michigan, Milwaukee, Wisconsin, and headquartered in Chicago. These comments were prepared by a team of experts.²

¹ Austin, J., et al., *America's North Coast: A Benefit-Cost Analysis of a Program to Protect and Restore the Great Lakes*, September 2007, at www.healthylakes.org/site_upload/upload/America_s_North_Coast_Report_07.pdf (September 26, 2007).

² Tina Rongers, a member of the Board of Directors and resident of Indiana, chaired the effort, with assistance from James Filippini, retired staff member of the U.S. EPA's Region 5 Water Division and Lyman C. Welch, manager of water quality programs for the Alliance for the Great Lakes.

BACKGROUND

Northwest Indiana is part of the largest industrialized corridor on the Great Lakes. For more than a century, Northwest Indiana's heavy industry has used Lake Michigan for gains that have seen the country through two world wars and promoted one of the strongest manufacturing-based economies in history. But these advances have come at a grave cost to public health and the environment. The Alliance believes that the proposed NPDES permit for USS must go further in preventing pollution and achieving clean water.

We applaud USS's significant capital investments in recent years to enhance its operational efficiency and environmental compliance. These corrective measures and ongoing efforts are making a difference locally yet high levels of pollution discharges from Gary Works persist. USS can no longer benefit from outdated wastewater standards to the detriment of water quality, human health and aquatic life. We also cannot allow its production activities to impede the region's progress and investments with respect to environmental remediation and restoration along the Grand Calumet River and Lake Michigan shoreline. Therefore, we urge USS to rapidly move into compliance with stricter water quality standards.

More restrictive and new limitations at each of the USS outfalls are needed and long overdue. Now is the time for IDEM to ensure that USS's permit results in the elimination of pollution over time as required by the federal Clean Water Act. The Alliance urges IDEM to strengthen USS's permit in the following areas.

ISSUES OF CONCERN IN THE PROPOSED NPDES PERMIT

The Permit's Compliance Schedules Violate Federal Law

Compliance schedules should only be allowed when the effluent limits being applied are new limits; since the permit previously had narrative limits for toxicity and other items, a compliance schedule should not be allowed. And, the narrative limits should evolve into interim requirements and specific discharge limits in this proposed permit.

According to Great Lakes Water Quality Initiative (GLI) standard *Limitations for Existing Great Lakes Dischargers*, discharges that have been in existence, and that have a new or more restrictive water quality based effluent limitation, may be subject to a 5-year compliance schedule.³ Specifically, Procedure 9(B)(3) states: "If a permit establishes a schedule of compliance under paragraph 1 which exceeds one year from the date of permit issuance or modification, the schedule shall set forth interim requirements and dates for their achievement."

³ Implementation Procedure 9: Compliance Schedules, part B (pg 15425 of the Federal Register).

The permit's five year compliance schedules for several toxic pollutants, including mercury, free cyanide, benzo(a)pyrene, zinc, copper, ammonia and Whole Effluent Toxicity Testing (WETT), violate these federal requirements. The draft permit includes compliance schedules of more than one year without specific interim requirements, only annual progress reports, to ensure compliance by the end of five years. This omission gives USS unnecessary latitude and allows for more pollution discharges than what should be allowed for the entire term of the permit. USS has had ample time to investigate the best available technologies and strategically plan for operational changes on assumptions of more restrictive discharge limits. As an ISO 14001 certified facility, it should be anticipating environmental issues and addressing concerns proactively. USS has not demonstrated that a shorter deadline for compliance with lower limits would cause hardship.

As such, we urge IDEM incorporate interim requirements and discharge limits in lieu of compliance schedules. The goal is to tighten pollution standards in the shortest period of time, and hold industry accountable during the process. Given IDEM's pattern of lengthy administrative extensions for USS, the proposed five-year schedule is also an abuse of IDEM's discretion.

Stronger Mercury Reduction Requirements are Warranted

The Canadian and U.S. governments, as parties to the Great Lakes Water Quality Agreement, negotiated a new policy in 1978 that stated that the discharge of any and all persistent toxic substances, including mercury, would be virtually eliminated. The Great Lakes Binational Toxics Strategy was developed jointly by Canada and the U.S. in 1996-97 with the goal of virtual elimination of persistent toxic substances including mercury in the Great Lakes basin.

Despite these agreements, Lake Michigan remains highly contaminated. The fish are not safe to eat, in part due to mercury contamination. The amounts of inorganic and elemental mercury in lake sediments are so great that even if there were no further input it would be many years before it would be safe to eat the fish. The Grand Calumet River also remains an impaired waterbody for mercury according to Clean Water Act § 303(d).

We oppose the streamlined mercury variance because there needs to be an overall mercury reduction. We suggest 1) a compliance schedule with interim requirements that can allow USS to ratchet down mercury levels to 1.3 ppt⁴, and 2) a multimedia mercury

⁴ We are uncertain whether a mixing zone was used to calculate the 1.3 ppt figure in the proposed permit. The mercury effluent limit should be calculated without the use of a mixing zone since mixing zones are contrary to the requirements of the Great Lakes Initiative. Bioaccumulative chemicals of concern are just that – they accumulate in the body. It defies good sense to dilute them in a mixing zone – a gram is a gram is a gram no matter how it gets into the lake. If a mixing zone was used to develop the 1.3 ppt figure, then this figure must be re-calculated without using a mixing zone.

reduction program to reduce mercury from all sources. Many other permits around the Great Lakes region include such PMPs.

Indiana must make a greater effort to eliminate mercury discharged from sources like the Gary Works plant. While we do recognize USS efforts to remove over 1,500 pounds of instrumentation at this facility, it has also has had years to prepare for mercury standards in its NPDES permit. There is no need to delay compliance or grant a variance for mercury emissions.

Stronger Oil and Grease Effluent Limitations are Warranted

The Grand Calumet River remains an impaired waterbody according to Clean Water Act § 303(d) for oil and grease among others. We commend IDEM for including the monitoring and reporting requirements to protect against visible oil sheen through the Visible Oil Corrective Action Monitoring Program, however, tighter effluent permit limits on oil and grease are required to improve the water quality of this impaired waterbody. See 40 C.F.R. §122.44(d). We oppose the use of the oil and grease bubble concept which transfers waste between outfalls, 034 and 030 for instance, instead of reducing pollution at each outfall. We are concerned that the overall reductions of oil and grease cited by USS may not be realized.

It is unclear to us whether the calculations used to determine the effluent limits for the proposed permit under the bubble approach include any discharges related to cokemaking or sintering operations. We note that 40 C.F.R. Section 420.03(f)(1) prohibits alternate effluent limitations for cokemaking process wastewater unless the alternative limitations are more stringent than the limitations for the cokemaking limits. Similarly, alternate limitations are prohibited for sintering operations unless they are more stringent than sintering category limits. If such discharges are included in the bubble, then the more stringent categorical limits should be applied.

Even if the bubble approach is applied, the overall oil and grease reduction should be greater than proposed to help restore the impaired Grand Calumet River. This can be achieved through tighter permit requirements and prevention measures such as a more aggressive visible oil sheen program for detection of mechanical leaks and operational spills.

Stronger Free Cyanide Reduction Requirements are Warranted

The site-specific criteria for free cyanide are based upon 1998 and 1999 data that cannot now be relied upon as representative of current conditions. The more recent USS dredging project and habitat restoration along segments of the Grand Calumet River are positively effecting water quality and aquatic life in ways that need to be quantified and given greater consideration in this proposed permit.

Since free cyanide has the reasonable potential to exceed the water quality based effluents, seasonal toxicity limits of free cyanide should not be allowed. The lower free cyanide limit must be established year round as an effective means of addressing whole effluent toxicity chronic limits and ensuring the long-term successes of returning aquatic life and ongoing restoration efforts.

Stronger Fish Protection Requirements Must be Included

The impingement and entrainment analysis of USS's intake structures is based on studies performed in the 1970s. The confirmed presence of adult salmonids in the GCR shows that ecological conditions have changed since the 1970s. USS's 30-year old study is now out of date and a new study should be performed. Such a study must provide representative data that accurately reflects the biological conditions at the site. Once the data have been collected through a new study, additional requirements may be needed in the permit to protect fish and other aquatic life pursuant to Clean Water Act § 316(b).

Greater Control of Thermal Effluent is Necessary

The proposed permit allows USS a three-year compliance schedule for meeting thermal requirements. While 327 IAC 5-2-12.1 and 327 IAC 5-2-12, provide for schedules of compliance with limitations and standards for reissued or modified permits, such schedules of compliance must be consistent with the requirements for obtaining variances under Indiana Code sections 13-14-8-8 and 13-14-8-9. These statutes require that IDEM find that immediate compliance with the thermal limitations in 327 IAC 5-2-11.7(c)(4)(B) would impose an undue burden or hardship on the permit applicant. The statutes also require a pollutant minimization plan. The Fact Sheet mentions neither. Because USS has not demonstrated an undue burden, we urge that the permit require immediate compliance with thermal effluent limits.

Stronger Stormwater Pollution Prevention Requirements Must Be Included:

The proposed permit requirements for stormwater are inadequate. The permit refers to a USS Stormwater Prevention Plan, but this plan has not been updated since 1997 nor is this plan properly integrated with Stormwater Prevention Plans for the Coke Plant and the requirements at the coal processing area. Therefore, IDEM should require USS to update its Stormwater Prevention Plan to reflect the changes at the facility over the past 10 years and IDEM must review and approve the revised stormwater plan.

In addition, the proposed permit improperly deleted stormwater monitoring and reporting requirements that are contained in the current permit. Such requirements must be maintained, including requirements for appropriate monitoring and analytical protocols. We understand that unpermitted stormwater outfalls to Lake Michigan have been discovered, yet the discharge from these outfalls has not been properly monitored. All

stormwater outfalls must be monitored on at least a quarterly basis rather than on an annual basis as in the proposed permit. These requirements must be explicitly incorporated into the permit to ensure compliance. Without proper monitoring and reporting, neither IDEM nor the public can adequately assess the potential for environmental harm that may be caused by these stormwater discharges.

CONCLUSION

For all of the above reasons, we request that IDEM take action to tighten permit limits further and require compliance on a more rapid timetable than contemplated in the proposed permit.